

What is claimed is:

1. A focusing apparatus of an automatic document feeder, having a scanning zone for an optical chassis to retrieve an image of a document, comprising:

5 at least one focusing chart, disposed at a location corresponding to the scanning zone, comprised of a plurality of focus detecting elements and capable of automatic focusing focus detecting by the optical chassis.

2. The focusing apparatus of an automatic document feeder of claim 1, wherein the plurality of focus detecting elements is black-and-white stripe
10 patterns of different densities.

3. The focusing apparatus of an automatic document feeder of claim 1, wherein in the optical chassis, the image is generated by the light emitted from the light source and reflected through the document, after being reflected by a plurality of reflection mirrors, and through the lens set, the image is focused onto the charge-coupled device for converting into digital signals manageable by the computer.
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4. The focusing apparatus of an automatic document feeder of claim 3, wherein the automatic focusing is made by arranging at least one reflection mirror capable of rotation to rotate and adjust for changing the image's clearness formed on the charge-coupled device.
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5. The focusing apparatus of an automatic document feeder of claim 3, wherein the automatic focusing is made by lens set to adjust the distance of its focused image for changing the image's clearness formed on the charge-coupled device.

25 6. The focusing apparatus of an automatic document feeder of claim 3, wherein the automatic focusing is made by treatment and adjustment of computer for changing the image's clearness formed on the charge-coupled device.

30 7. The focusing apparatus of an automatic document feeder of claim 1, wherein the automatic document feeder is further arranged with a guiding board, which is kept an appropriate height from the scanning zone, and the appropriate height provide a passage for the document.

8.The focusing apparatus of an automatic document feeder of claim 7, wherein the guiding board comprising:

a groove for providing a connection with the focusing chart;

a first open groove arranged at an appropriate position away from the groove for providing a placing-into roller to make the document placed into the automatic document feeder; and

a second open groove arranged correspondingly to the first open groove for providing a releasing roller to make the document released from the automatic document feeder.

9.The focusing apparatus of an automatic document feeder of claim 8, wherein the groove is connected in the proximity of one side end of the open groove and appropriately projected out from the focusing chart, and another side end, after being connected, is appropriately placed under the focusing chart.

10.The focusing apparatus of an automatic document feeder of claim 8, wherein the focusing chart is connected with the groove by the manner of direct pasting.

11.The focusing apparatus of an automatic document feeder of claim 8, wherein the focusing chart is arranged on a focusing-connection-seat that is connected to the groove with at least one fastener.

12.The focusing apparatus of an automatic document feeder of claim 7, wherein the guiding board comprising:

a penetrating groove, which is arranged correspondingly to the scanning zone;

a first open groove, having an appropriate position away from the penetrating groove for providing a placing-into roller to make the document enter the automatic document feeder; and

a second open groove, which is arranged correspondingly to the first open groove for providing a releasing roller to make the document released from the automatic document feeder.

13.The focusing apparatus of an automatic document feeder of claim 12,

wherein a rotating wheel is further arranged on the upper portion of the guiding board, and the rotating wheel can be connected with a plurality of focusing charts of different densities and arranged annularly to provide rotation and fixation for a focusing chart in corresponding to the penetrating groove.

14. The focusing apparatus of an automatic document feeder of claim 13, wherein the rotating wheel is rotated and secured by a gear set.